OFFICE OF SAFETY AND MISSION QUALITY PUBLICATION NHB 5310.3

April 1993

PROCEDURES FOR NASA ALERT REPORTING OF PARTS, MATERIALS, AND SAFETY PROBLEMS

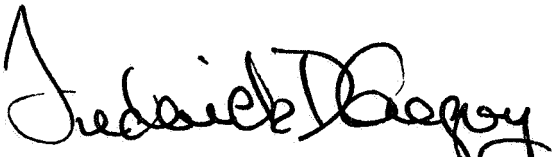
National Aeronautics and Space Administration

PREFACE

This Handbook establishes common, general requirements, and procedures for NASA ALERT reporting to ensure that significant problems involving parts, materials, and safety are received, reviewed, reported, and distributed through use of a closed-loop process. Many parts, materials, and safety problems are occurring in existing systems. Therefore, applicable information about these problems should be abstracted for NASA ALERT reporting. It is not necessary nor intended to establish a new internal problem reporting system to satisfy this NHB.

The requirements and procedures of this Handbook shall be applied to all NASA programs, projects, and procurements.

Questions concerning the application of these requirements and procedures to specific procurements should be referred to the procuring NASA Installation. General questions as to the intent of the provisions herein should be referred to the National Aeronautics and Space Administration, Director, Quality Assurance Division, Office of Safety and Mission Quality, Washington, D.C., 20546.



Frederick D. Gregory
Associate Administrator for
Safety and Mission Quality

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CHAPTER 1: INTRODUCTION

100 SCOPE

1. This NASA Handbook describes a closed-loop process for reporting significant parts, materials, and safety problems that are of general concern to NASA. This document provides the procedures for the receipt, screening, reporting, timely distribution, and closeout of problems within NASA as well as external problem reports originating from the Government-Industry Data Exchange Program (GIDEP), NASA Centers, contractors, and other sources.

2. It is imperative that NASA activities be cognizant of part and material problems, and unsafe conditions that might adversely affect NASA missions. A closed-loop reporting process will ensure that proper investigation, corrective action where required and closeout is completed for reported problems to minimize impact on NASA programs and projects.

101 APPLICABILITY

This Handbook is applicable to NASA Headquarters, all Field and Component Installations and JPL (reference NMI 1101.2).

102 POLICY AND RESPONSIBILITIES

NASA policy and responsibilities for ALERT reporting are defined in NMI 5310.1, "NASA ALERT Reporting of Parts, Materials, and Safety Problems."

103 GLOSSARY OF TERMS

Appendix A is a glossary that defines selected terms used in this publication.

CHAPTER 2: PROBLEM REPORTING PROCESS

200 GENERAL

The NASA closed-loop problem reporting process procedures shall be developed and implemented, in accordance with NMI 5310.1, which may be tailored to meet specific program needs. Problem reporting is accomplished through the use of an ALERT, which is a report used to rapidly disseminate information on a significant part, material, or safety problem of general concern. This includes (but is not limited to) GIDEP ALERT's/SAFE-ALERT's and NASA ALERT's/SAFE-ALERT's.

201 GOALS

The goals of the closed-loop reporting process are to rapidly screen, distribute and track closeout actions resulting from part, material, and safety problem reports. This process will ensure that the following events occur:

1. Significant problems are immediately reported.

2. ALERT's/SAFE-ALERT's are immediately examined.

3. An Initial response to ALERT's/SAFE-ALERT's is required within 30 calendar days.

4. Followup reports are required until closeout.

5. Use of problem parts and materials is prevented.

202 PROCESS OVERVIEW

Closed-loop reporting assures that there is an audit trail from identification to closeout of all problem reports. This process ensures that all problem reports affecting safety and/or mission success have been evaluated for impact and corrective action has been taken. These problem reports may originate internally or externally to the Center.

203 INTERNAL PROBLEMS

The overall process for identifying and resolving parts, materials, and safety problems that occur within NASA Centers is shown in Figure 1. This process may be tailored to satisfy operational differences at each Center. There are three elements of the process: problem identification, ALERT coordination, and problem assessment and feedback. The procedures for each element are as follows:

1. Problem Identification. All significant internal parts, material, and safety problems of general concern (including components, manufacturing processes, test

equipment, specifications and safety hazards), identified by Center personnel, are immediately reported to the Center ALERT Coordinator in a problem report. To ensure expeditious reporting of potential problems to all concerned parties, a NASA Preliminary ALERT/SAFE-ALERT may be issued (see paragraph 301). The NASA Preliminary ALERT provides an early warning until further analysis can be done and a formal ALERT can be released.

2. ALERT Coordination. Upon receipt of an internal problem report, the ALERT Coordinator will coordinate, review, and distribute the problem report to the Center project, engineering, SRM&QA managers, and other appropriate organizations for review.

   a. The Coordinator will also forward a copy of the problem report to Headquarters and other Center ALERT Coordinators for review and feedback as appropriate. In cases of suspected fraud, a copy of the report should be sent to the Office of Inspector General (OIG).

   b. The Coordinator will submit all pertinent internal problem reports to GIDEP after appropriate review and approval in accordance with NMI 5310.2, "Participation in Government-Industry Data Exchange Program (GIDEP)."

   c. For NASA programs/projects that involve an international partner (such as the European Space Agency), the GIDEP ALERT information will be reviewed and evaluated prior to release to ensure that only information pertinent to the international partner participation is disseminated. This requirement complies with NMI 2110.1, "Foreign Access to NASA Technology Utilization Material." Further guidance may be obtained from the NASA Technology Utilization Division and GIDEP.

3. Problem Assessment and Feedback. Organizations receiving a part, material, and safety problem report from the Center ALERT Coordinator shall review each report for applicability and provide an initial response to the coordinator within 30 days (see paragraphs 401 and 402).

   a. If applicable, the initial response will state if there is an impact. This response should be followed by a Parts, Materials and Safety Problem Impact Statement (see paragraph 401) which identifies the appropriate action to be taken. Follow-on reports are provided until closeout.

b. For a nonapplicable problem report, a "no action required" response shall be provided.

204 EXTERNAL PROBLEMS

The overall process of receiving and resolving parts, materials, and safety problem reports from outside the Center (other Centers, GIDEP, other sources) is shown in Figure 2. The Center ALERT Coordinator will immediately screen and distribute incoming problem reports to the Center project, engineering, SRM&QA managers and other appropriate organizations for their review, feedback, and problem resolution in a similar manner to that used for internal problems (paragraph 203). The primary differences are (1) no internal coordination of the Alert (problem) and (2) no need to evaluate and submit the Alert to GIDEP. Only necessary and needed information will be sent to the international partners.

205 MANAGEMENT INTERFACE TO PROCESS

The closed-loop reporting process is designed to maintain Center awareness of problem reports, review problem impact statement responses and verify closeout actions.

1. Management relationship to the process is (1) to develop the internal center procedures and (2) to maintain continuous oversight of the process. These procedures shall ensure that:

   a. All significant problems, within the scope of this NHB, are immediately reported (to the Center ALERT Coordinator.)

   b. All GIDEP and NASA ALERT's/SAFE-ALERT's, and other problem reports are screened and rapidly distributed to the appropriate project engineering office, SRM&QA office, managers and other organizations. (Note: Unless requested by a project, NASA contractors will not normally receive NASA ALERT's/SAFE-ALERT's.)

   c. All ALERT's/SAFE-ALERT's are immediately examined for applicability under their cognizance.

   d. An initial response is received by the ALERT Coordinator within 30 calendar days regarding Impact/No-Impact to a program/project from a GIDEP ALERT/SAFE ALERT or NASA ALERT/SAFE ALERT. A Parts, Material, and Safety Problem Impact Statement (e.g., see form in Appendix D) may be used for initial response and for follow-on reports until closeout. A final Parts, Materials, and Safety Problem Impact Statement report is

required when corrective action has been implemented.

e. Further use of identified problem parts or materials, or areas involving unsafe conditions, is prevented until satisfactory and timely corrective action has been taken; or until continued usage is supported by written justification and subsequent approval by the project/engineering manager or the Center safety director.

2. Management oversight of the process includes designation of a Center ALERT Coordinator to implement the Center ALERT reporting procedures. As a minimum, the Center ALERT Coordinator shall:

a. Coordinate, investigate, screen for technical validity and distribute all Center-issued ALERT's/SAFE-ALERT's and submit an approved copy to GIDEP as appropriate.

b. Notify the manufacturer of a ALERT/SAFE-ALERT for their product and request their comments.

c. Screen all outside problem reports (other Centers, GIDEP) for appropriate distribution and disseminate them within the Center in a timely manner.

d. Maintain communications with other Center ALERT Coordinators and manufacturers. Maintain a permanent data base of ALERT's/SAFE-ALERT's and problem impact statements.

e. Be a GIDEP Representative and issue addenda to GIDEP ALERT's/SAFE- ALERT's.

f. Notify the Inspector General in instances of suspected fraudulent parts or materials.

3. Effective functioning of the process requires participation of the Center project personnel. Project and Functional Area Managers shall identify and immediately report all significant problems of general concern to the Center ALERT Coordinator. They shall ensure that all incoming problem reports are rapidly distributed to the appropriate project personnel and contractors.

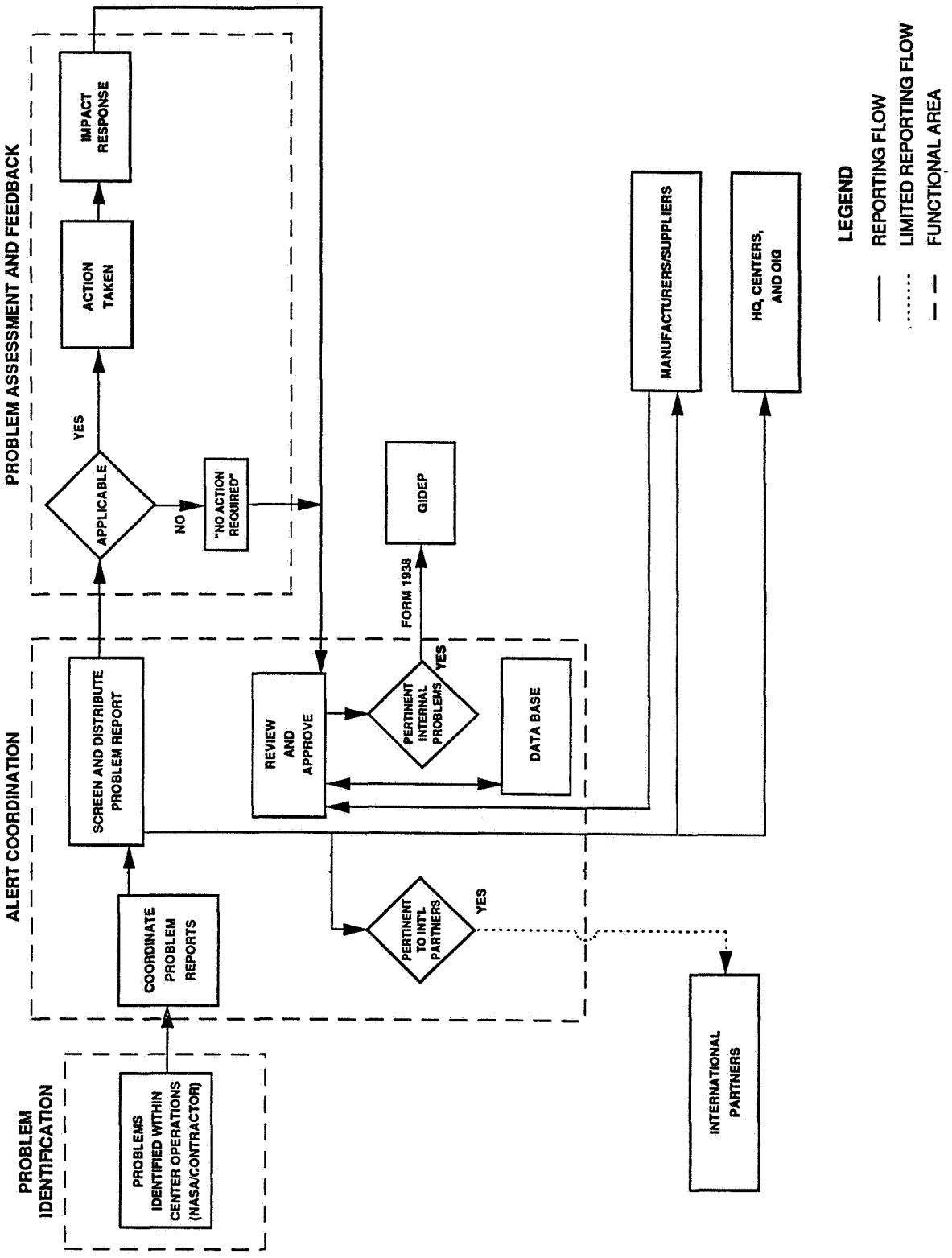

FIGURE 2-1. CLOSED-LOOP REPORTING PROCESS FOR INTERNALLY IDENTIFIED PROBLEMS

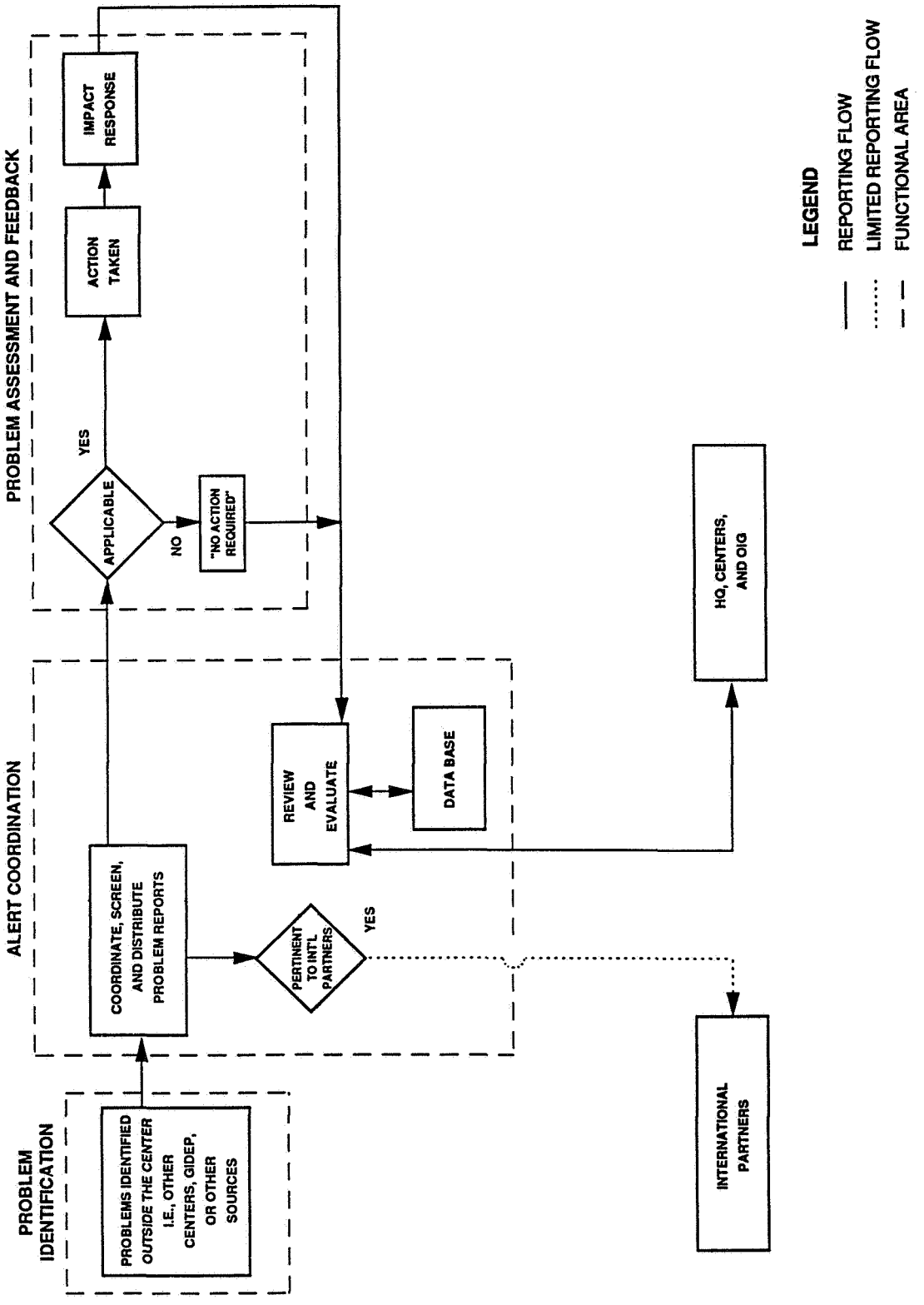

FIGURE 2-2. CLOSED-LOOP REPORTING PROCESS FOR EXTERNALLY IDENTIFIED PROBLEMS

CHAPTER 3: NASA ALERT/SAFE-ALERT PREPARATION PROCEDURES

300 PROBLEM EVALUATION

Reporting part, material, and safety problems includes (but is not limited to) the following (refer to Appendix B for typical examples):

1. Failures or potential failures of items under normal operating or storage conditions. The failed part or material causing the problem should be identified.

2. Previously unidentified damage or deterioration of part/material physical or functional characteristics resulting from equipment fabrication methods and processes. Methods and processes include assembly, bonding, cleaning, coating, encapsulation, handling, sealing, and welding.

3. A series of isolated failures of the same part or material that is indicative of a failure trend.

4. Nonconformance of parts or materials to procurement specifications due to manufacturer's engineering or fabrication changes.

5. Nonconformance of an item to recognized safety codes or standards, which could result in a hazard.

6. Failure or malfunction of safety devices, equipment, apparatus, or systems.

7. Applications, operations, processes, specifications, or procedures adversely affecting safety.

8. Erroneous specifications.

301 REPORT FORM

ALERT Form DD-Form-1938 is used for NASA ALERT's/SAFE-ALERT's to establish a uniform record of each problem and for possible submission to GIDEP. For NASA Preliminary ALERT's/SAFE-ALERT's the use of this form is suggested and should be stamped or printed with "NASA PRELIMINARY" to indicate the ALERT status (see Appendix C) or another Center approved form (including teletype wire transmissions). The Report Control number for NASA ALERT's and NASA SAFE-ALERT's is RCS 10-0000-00307.

302 REPORT PREPARATION

All of the information included in a NASA ALERT report shall be objective and factual. Instructions for preparing the report are printed on the back of the DD-Form-1938. Care must be taken to obtain detailed information that will effectively inform others of the problem. The report preparer shall:

1. For hardware, include the following:

   a. Name of manufacturer (Block 4) and procurement document number (Block 6). List the supplier (Block 11) if pertinent to the failure.

   b. Positive identification of failed hardware (Block 8), including lot or serial numbers and NASA tag number if applicable (Block 9).

   c. Functional use of the hardware (Block 11).

   d. Failure cause (failure mechanism, application, etc.). State circumstances under which the hardware failed if failure cause has not been determined (Block 11).

   e. Corrective actions taken (Block 12).

   f. Date the manufacturer was notified (Block 13).

2. For process, procedural, or operational problems, include the following:

   a. Description of the faulty process or sequence of events (Block 11).

   b. Document(s) involved and source(s) (Block 11).

   c. Cause and effects (Block 11).

   d. Corrective actions taken (Block 12).

3. Consider including the following information in the report:

   a. Pertinent environmental history of failed hardware (Block 10).

   b. Name of program, project, system, or subsystem (Block 11).

   c. Documentation inadequacies (specifications, instructions, application notes, etc.) (Block 11).

d. Problem information source (Block 11).

e. Warranty, guarantee, or shelf life ("use before") dates (Block 11).

f. Comment on completeness of information (Block 11).

g. Whether manufacturer has replied; attach the comments (Block 14).

4. Consider issuing both a NASA ALERT and NASA SAFE-ALERT when there is simultaneously a part/material problem and safety hazard.

5. Consider issuing a partially completed NASA ALERT or NASA SAFE-ALERT when complete technical detail is not available. Partially completed NASA ALERT's/SAFE-ALERT's shall be marked "PROBLEM(S) IDENTIFIED ONLY" and treated in the same manner as a completed NASA ALERT/SAFE-ALERT. The partially completed ALERT's shall be followed by addenda, as soon as possible, to complete the report.

6. Include an issuing number (Blocks 2 and 19) assigned by the Center ALERT Coordinator. The following uniform numbering method is required for GIDEP ALERT submission and is recommended but any convenient method may be used for a NASA PRELIMINARY ALERT/SAFE-ALERT:

   a. The assigned number is composed of a hyphenated, alphanumeric code in the following sequence: (originator's identification code) - (type of report) - (year of issuance) - (sequence number). For example, H1-A-89-02 should be the number assigned to the second NASA ALERT issued by MSFC in 1989.

   b. The originator's identification code is found in (and shall comply with) the "Roster of GIDEP Representatives," Section 10, GIDEP Policies and Procedures Manual.

   c. NASA Centers may use their initials (e.g., GSFC, JSC, KSC, etc.), but their GIDEP originator's identification code is preferred. The type of report is identified by "A" for NASA ALERT and "S" for NASA SAFE-ALERT. Only the last two digits of the year of issuance are used. The sequence number is assigned consecutively by the originator and shall always begin with 01 at the start of a new calendar year.

d. Addenda to NASA ALERT's or NASA SAFE-ALERT's shall use the same number as the original issue followed by a suffix letter; e.g., H1-A-89-02B would be the second revision.

303 REPORT DISTRIBUTION

1. The Center ALERT Coordinator shall coordinate, review, screen, and approve all preliminary NASA ALERT's, NASA ALERT's and GIDEP ALERT's for distribution, in accordance with issuing center's procedures, as appropriate. The use of electronic reporting or data transfer may be used when available.

2. The Center ALERT Coordinator should allow a minimum of 15 working days for the manufacturer(s) to comment on the NASA ALERT or NASA SAFE-ALERT report prior to submission to GIDEP. A telephone call (or registered mail, etc.) should be used to verify the manufacturer's receipt of the NASA ALERT/SAFE-ALERT. This does not apply to partially completed NASA ALERT's or NASA SAFE-ALERT's.

3. Distribution of ALERT's and SAFE-ALERT's, including those discussed in paragraph 302.5, will be to all addressees on the Headquarters Problem ALERT Reporting Distribution List and to manufacturer(s), if appropriate.

4. The Center ALERT Coordinator shall submit a copy of pertinent problem reports to GIDEP in accordance with the instruction set forth in NMI 5310.2.

CHAPTER 4: PROBLEM REPORT RESPONSE PREPARATION PROCEDURES

400 REPORT EVALUATION

For each problem report distributed internally by the Center ALERT Coordinator, the receiving organizations shall evaluate the report and provide an initial Parts, Material, and Safety Problem Impact response to the Center ALERT coordinator (paragraphs 203 and 204). Each report shall be reviewed for:

1. Relevance of the problem to current or near-term programs and projects.

2. Impact on programs and projects.

3. Actions taken to reduce/eliminate any detrimental effects on programs and projects.

401 REPORT FORM

A Parts, Materials, and Safety Problem Impact Statement, NASA FORM 1544, or Center-generated equivalent form should be used to report the effect that a problem is expected to have on Center programs/projects (see Appendix D). The use of electronic data transfer/reporting may be used when available to expedite problem reporting.

402 PARTS, MATERIALS AND SAFETY PROBLEM IMPACT STATEMENT PREPARATION

The problem impact statement shall reflect the consequences that a parts, materials, and safety problem is expected to have on Center programs/projects. Instructions for preparing the Parts, Materials and Safety Problem Impact Statement are printed on the back of the impact statement form. An initial response stating either "No Action Required," or providing such information as is known must be prepared and returned to the coordinator within 30 days. For the limited number of GIDEP ALERT's that deal with fraud, the NASA Headquarters Coordinator may request additional cost and impact data to assist in any cost recovery action. The Parts, Materials and Safety Problem Impact Statement preparer shall:

1. For hardware, include:

    a. Identification of the hardware which may fail, including: lot or serial numbers, name of the manufacturer and the procurement document number. List the supplier if pertinent to the failure (Block 7)

b Consequences of functional use of the hardware and circumstances under which the hardware may fail (Block 8)

c Corrective actions taken (Block 9)

2 For process, procedural, or operational problems, include:

a Document(s) involved and source(s) (Block 7)

b Impact on processes, procedures, or operations (Block 8)

c Corrective actions taken (Block 9)

3 For all reports, include the following mandatory information:

a Names of responsible individuals/organizations to contact for further technical details (Block 5)

b Name of program, project, system, or subsystem impacted (Block 7)

c Results of contractor's assessment of problem applicability to hardware/program, including level of impact (minor, major, critical - see the NASA Handbook of NASA Assurance Terms and Definitions) (Block 8)

d Closeout action including an analysis and determination of problem, corrective action taken and other recommendations or pertinent remarks (Block 9)

403 PARTS, MATERIALS, AND SAFETY PROBLEM IMPACT STATEMENT REPORT DISTRIBUTION

Each Problem Impact Statement preparer shall submit the report to the program/project/assurance managers for review and action A copy of this response/report shall also be sent to the Center ALERT Coordinator The Coordinator maintains a file/log for tracking problem reports/ ALERT's and their Impacts to ensure that closeout of these parts, materials, and safety problems is accomplished

APPENDIX A: GLOSSARY OF TERMS

ALERT - A report used to rapidly disseminate information on a significant part, material, or safety problem of general concern This includes (but is not limited to) GIDEP ALERT's/SAFE-ALERT's and NASA ALERT's/SAFE-ALERT's

Closed-Loop Process - A series of steps that will proceed until all the required actions (including feedback) are completed

GIDEP ALERT - A report issued to notify all users from Government agencies and industry of a significant part or material problem of general concern

GIDEP SAFE-ALERT - A report issued to notify all users from Government agencies and industry of a significant safety problem of general concern A SAFE-ALERT addresses a problem that may cause personal injury, loss of life, or extensive equipment or facility damage

Part/Material - All grades of standard and special design items including:

- Mechanical, hydraulic, pneumatic, electrical, electromechanical, and electronic parts (including microcircuits/microcircuit modules)
- Materials associated with the above items (such as ferrous and nonferrous metals, plastics, sealants, adhesives, lubricants, insulation, wire, solders, fluxes, shielding, hose, tubing, and hydraulic fluids)
- Materials used in aerospace structures and equipment

Part/Material Problem - During any phase of an item's life-cycle after manufacturer's release, if a part or material evidences one of the following:

- Failure or potential failure
- Malfunction
- Part design limitation
- Application limitation
- Unexpected incompatibility
- Deterioration (degradation or contamination)
- Unsafe condition

NASA PRELIMINARY ALERT/SAFE-ALERT - NASA report used to rapidly disseminate information on a potentially significant part/ material or safety problem of general concern A NASA PRELIMINARY SAFE-ALERT may not necessarily involve a part or material A NASA PRELIMINARY ALERT/SAFE-ALERT may become a GIDEP ALERT/SAFE-ALERT

Problem of General Concern - A problem that may occur in applications other than where the problem was first identified Excluded are part or material problems caused by users as a result of improper handling, misapplication, or secondary failures and safety problems resulting from neglect or carelessness on the part of the user

Safety Problem - A situation that has resulted, or could result in, the loss of life, injury of personnel, or damage to or loss of property

Significant Problem - A problem that has the potential for:

- Causing loss of life, serious injury, or major damage to or loss of property
- Causing major delays in schedules
- A high probability of occurrence in-flight or in mission essential ground support equipment

APPENDIX B: EXAMPLES OF PROBLEMS FOR ALERT'S AND SAFE-ALERT'S

1 EXAMPLES OF PROBLEMS FOR ALERT'S

a Faulty Design The design of a particular coaxial connector did not allow pin entry into the socket until after engagement of the nut Additionally, the pin was not held rigidly into the connector Consequently, the weight of the cable caused misalignment of the pin during assembly

b Faulty Production Techniques Analysis led to the following comment on a relay: "Cause of failure is attributable to internal contamination, consisting of metallic particles, solder splash, nylon particles, and an unidentified white powder Investigation at manufacturer's plant indicates that all relays from a particular line are so contaminated"

c Potential Problem Condition Corona discharge was detected during use of a resistor under high voltage operation This was traced to improper evacuation during potting by installation of a heat-shrinkable tubing sleeve Corona resulted between the tubing wall and the resistor surface

d Unusual Failure Under Normal Operation The resistance of metal film resistors increased as much as 50 percent after operating at low power levels Metal migration occurred when operated at only 20 to 30 percent of rated voltage due to contamination Migration accelerated when there was insufficient energy in the resistor to vaporize moisture off the metal film

e Followup ALERT to a Previous Problem The initial ALERT described a transistor that failed open due to an internal bond wire fracture The problem occurred because the wire fatigued by repeated mechanical flexing from power switching The addenda reported on progress made by further investigations and test results

2 INFORMATION NOT INCLUDED IN ALERT'S

ALERT's are intended to define actual or potential problems of general concern, and not to report normal failures or testing rejections To ensure that reporting information is not diluted by irrelevant data, ALERT's should not be submitted in the following situations:

a Problem Attributable to Secondary Cause Knowledge that an operating device failed because a power supply went out of regulation is of no value to others The reason

for the power supply failure, however, may be of interest

b Problem Not Traceable to a Specific Part or Material If it is not possible to identify a system or equipment failure to a particular part or material, the failure is not of general interest Tabulations of system failures are not pertinent to ALERT's

c Problem Caused by Human Error Human error that produces failures are not of general concern However, if the detection of such cases helps to solve industry-wide problems, disclosure may be acceptable

d Problem Resulting from Misapplication or Misuse If a failed part or material was stressed beyond its known or specified capabilities, the failure is not of concern to other participants

3 EXAMPLES OF PROBLEMS FOR SAFE-ALERT'S

a Hazardous Condition Design of a resuscitator revealed that certain internal parts were not oxygen-compatible, which rendered the resuscitator useless under emergency conditions Investigation revealed that the manufacturer was unaware of this problem and the model was in wide use

b Unsafe Practice or Application While a pneumatic differential pressure gauge was being used between its differential limits, maximum pressure was exceeded This caused the front glass face to blow out, injuring the operator This case also revealed a design deficiency; the gauge lacked a blowout plug or line restrictor to prevent the glass from being expelled

c Faulty Production or Processing Techniques The rim holding the seat of an ordinary office swivel chair failed when the occupant leaned back This caused a severe fall with the occupant landing on his back Failure was attributed to metal fatigue caused by the bending radius of the rim being too small

4 INFORMATION NOT IN SAFE-ALERT'S

The SAFE-ALERT is intended to define an actual or potential hazard or safety problem of general concern, and not to report normally recognized industrial or system safety problems The reporting systems must not be diluted with irrelevant data

APPENDIX C: DD-FORM-1938, GIDEP ALERT, SAMPLE

GOVERNMENT-INDUSTRY DATA EXCHANGE PROGRAM

ALERT

Form Approved OMB No. 0704-0188

Please Type All Information ; See Instructions On Reverse

18. NOMENCLATURE: TUBE, METALLIC, SEAMLESS, ANNEALED

1. NOMENCLATURE (Part/Material/Hazard/Safety Problems)
TUBE, METALLIC, SEAMLESS, ANNEALED

2. ALERT/SAFE-ALERT NO.
CV1-A-92-01

3. DATE (Year, Month, Day)
JUNE 11, 1992

4. MANUFACTURER AND ADDRESS
TELEDYNE COLUMBIA-SUMMERILL
P. O. BOX 302
FRANKLIN STREET
SCOTTDALE, PA 15683
H4: 8C309

5. NSN
N/A

6. PROCUREMENT SPECIFICATION
MIL-T-8808B

7. REFERENCE
N/A

8. MANUFACTURER'S PART NUMBER
See Below

9. LOT/DATE CODE OR SERIAL NO.
Heat No. AH3773

10. SPECIAL REQUIREMENTS OR ENVIRONMENT (Requirements placed on, or extreme environment to which item was exposed)
None

11. PROBLEM SITUATION AND CAUSE (State facts of problem and cause-failure mode and mechanism-project and function)
Material received by McDonnell Douglas Space Systems Company was internally borescoped during inspection at the next assembly level. An orange/brown corrosion and surface pitting was discovered on the interior. All stock of this pipe was checked and found to exhibit the same anomaly. Material at distributor was also checked and found to be corroded internally. Cause of corrosion unknown, but Teledyne's processing is suspected.

Manufacturer's Part Number's
86750261.25X.035
86750261.25X.035X508

12. ACTIONS TAKEN (State all actions taken to correct the problem situation and to prevent its recurrence)

19. ALERT/SAFE-ALERT NO.: CV1-A-92-01

13. DATE MFR NOTIFIED (Year, Month, Day)
1992 May 06

14. MANUFACTURER RESPONSE
[X] CORRESPONDENCE ATTACHED
[ ] DID NOT REPLY

15. CONTACT POINTS FOR INFORMATION (Name, Affiliation, Phone)
Chris A. Koontz
Quality Assurance Program Representative
McDonnell Douglas Space Systems Company
(714) 896-2916

16. ALERT COORDINATOR (Name, Affiliation)
Margot Blair
McDonnell Douglas Space Systems Company

17. SIGNATURE OF ALERT COORDINATOR
Margot Blair

DD-FORM-1938, NASA PRELIMINARY GIDEP ALERT, SAMPLE

GOVERNMENT-INDUSTRY DATA EXCHANGE PROGRAM

PRELIMINARY ALERT

Please Type All Information — See Instructions On Reverse

Form Approved OMB No. 0704-0188

1. NOMENCLATURE (Part/Material/Hazard/Safety Problems)	2. ALERT/SAFE-ALERT NO.
TUBE, METALLIC, SEAMLESS, ANNEALED	CV1-A-92-01
	3. DATE (Year, Month, Day): JUNE 11, 1992

4. MANUFACTURER AND ADDRESS	5. NSN	
TELEDYNE COLUMBIA-SUMMERILL P. O. BOX 302 FRANKLIN STREET SCOTTDALE, PA 15683 H4: 8C309	N/A	
	6. PROCUREMENT SPECIFICATION: MIL-T-8808B	7. REFERENCE: N/A
	8. MANUFACTURER'S PART NUMBER: See Below	9. LOT/DATE CODE OR SERIAL NO.: Heat No. AH3773

10. SPECIAL REQUIREMENTS OR ENVIRONMENT (Requirements placed on, or extreme environment to which item was exposed)

None

11. PROBLEM SITUATION AND CAUSE (State facts of problem and cause-failure mode and mechanism-project and function)

Material received by McDonnell Douglas Space Systems Company was internally borescoped during inspection at the next assembly level. An orange/brown corrosion and surface pitting was discovered on the interior. All stock of this pipe was checked and found to exhibit the same anomaly. Material at distributor was also checked and found to be corroded internally. Cause of corrosion unknown, but Teledyne's processing is suspected.

Manufacturer's Part Number's

86750261.25X.035

86750261.25X.035X508

12. ACTIONS TAKEN (State all actions taken to correct the problem situation and to prevent its recurrence)

13. DATE MFR NOTIFIED (Year, Month, Day)	14. MANUFACTURER RESPONSE	15. CONTACT POINTS FOR INFORMATION (Name, Affiliation, Phone)
1992 May 06	[X] CORRESPONDENCE ATTACHED [ ] DID NOT REPLY	Chris A. Koontz Quality Assurance Program Representative McDonnell Douglas Space Systems Company (714) 896-2916

16. ALERT COORDINATOR (Name, Affiliation)	17. SIGNATURE OF ALERT COORDINATOR
Margot Blair McDonnell Douglas Space Systems Company	Margot Blair

18. NOMENCLATURE: TUBE, METALLIC, SEAMLESS, ANNEALED

19. ALERT/SAFE-ALERT NO.: CV1-A-92-01

INSTRUCTIONS FOR PREPARING DD FORM 1938,
"GOVERNMENT - INDUSTRY DATA EXCHANGE PROGRAM ALERT"

1. NOMENCLATURE - Enter major subject category classification and function information obtained from the Government-Industry Data Exchange Program (GIDEP) Subject Thesaurus.

2. ALERT/SAFE ALERT NO. - Use originator's code assigned by GIDEP. Enter letter "A" for ALERTS or letter "S" indicating SAFE ALERT when subject or ALERT affects health or safety of personnel who may come in contact with defective part or unit it is assembled into. The letter is followed by last two digits of year and then by consecutive sequence number of all ALERTs submitted by the originator for that year. An addendum is indicated by adding a change letter (A, B, or C, as required) to the sequence number. *For example:* XX-A-77-02A is ALERT number for addendum to second ALERT in 1977 by an originator with code XX.

3. DATE - This is date ALERT is released by ALERT Coordinator. Note coordination procedures in 13. Each addendum should have new release date.

4. MANUFACTURER AND ADDRESS - List *actual manufacturer of item. Also enter Manufacturer's Federal Code Number (MFCN) from* Federal Handbook H4-1 or H4-2. When possible, also enter Contract Administration Service Code Number (CASN) from DOD 4105.59-H. If supplied from source other than manufacturer and this is pertinent, also list the source here or in Block 10. If ALERT is against a category or application, do not identify manufacturer.

5. NATIONAL STOCK NUMBER - (Formerly Federal Stock Number.) List applicable number. If several numbers are applicable and space is *not available, place asterisk after last number and continue entry in* Block 10. As a minimum, enter Federal Supply Class.

6. PROCUREMENT SPECIFICATION - List applicable procurement specification and name of issuing organization. Include, in Block 10, nearest government or industry specification and any exceptions or special recognized government or industry specification requirements which were imposed.

7. REFERENCE - List any applicable documentation not included as part of this ALERT, e.g., previous ALERT number, TWX, or report number.

8. MANUFACTURER'S PART NUMBER - List manufacturer's catalog identification/part number of item. If different than procurement specification identification, list nearest similar manufacturer's identification and list differences in Block 11.

9. LOT/DATE OR SERIAL NO. - When problem is applicable to only certain lot/date code or serial numbered items, list appropriate code or number. Use year purchased if other information is not available. Blank space indicates "all."

10. SPECIAL REQUIREMENTS OR ENVIRONMENT - State any special requirements placed on item or any special or extreme environment to which it was subjected. This would include any exceptions or requirements other than imposed in applicable procurement specification listed in Block 6.

11. PROBLEM SITUATION AND CAUSE - State facts of problem and cause, including failure mode and mechanism.

12. ACTIONS TAKEN - State all actions taken to correct problem situation and to prevent further occurrences. This will include any actions taken by manufacturer, if known.

13. DATE MANUFACTURER NOTIFIED - Release of ALERT requires that a copy be sent to manufacturer identified in Block 4 and fifteen *(15) working days be allowed for a reply. When available, attach a copy of the reply to the* ALERT.

14. MANUFACTURER RESPONSE - Item manufacturer must be notified. When manufacturer correspondence is included, check CORRESPONDENCE ATTACHED entry. When manufacturer does not reply, check DID NOT REPLY entry. If ALERT is against a category or application and manufacturer is not identified, enter N/A in CORRESPONDENCE ATTACHED entry.

15. CONTACT POINTS FOR INFORMATION - Enter name, affiliation, and telephone number of persons to contact for further information. This may include designated personnel from ALERT originator's organization, or any other organization.

16. ALERT COORDINATOR - Enter name and affiliation of the ALERT Coordinator.

17. SIGNATURE - Signature of ALERT Coordinator.

18. NOMENCLATURE - Same as in Block 1.

19. ALERT/SAFE-ALERT NO. - Same as in Block 2.

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APPENDIX D: PARTS, MATERIAL, AND SAFETY PROBLEM IMPACT STATEMENT

NASA National Aeronautics and Space Administration

Parts, Materials, and Safety Problem Impact Statement

1. Subject	2. Date
3. Reference Report	4. Reference Report Date
5. Contact Points for Information	
6. Center Alert Coordinator *(Signature)*	6a. Impact Statement Preparer
7. Programs and Projects Impacted	
8. Impact on Programs and Projects	
9. Action Taken	

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INSTRUCTIONS FOR FILLING IN THE PARTS, MATERIALS, AND SAFETY PROBLEM IMPACT STATEMENT FORM

1 **Subject** - Enter the subject of the identified problem report

2 **Date** - Enter Impact Statement preparation date

3 **Reference Report** - Enter title, source, and identification number of ALERT (NASA, GIDEP) or other problem source report

4 **Reference Report Date** - Enter date of the problem source report, identified above

5 **Contact Points for Information** - Enter the names of responsible individuals and organizations, including phone numbers, to be contacted for further technical details and information

6 **Center ALERT Coordinator** - The Center ALERT Coordinator approval of completed form

6a **Impact Statement Preparer** - Enter identification of individual preparing the Impact Statement Form

7 **Programs and Projects Impacted** - Enter a list of programs and projects that would be impacted as a result of the information received from the referenced report If there is no impact, use "NONE or NO IMPACT"

8 **Impact on Programs and Projects** - Provide a summary that outlines impact(s) that the reference report has on the identified program(s) and project(s)

9 **Action Taken** - Provide a summary of actions taken to eliminate or minimize impact(s) on the identified program(s) and project(s), including level of impact (ie critical, major or minor)